

REMARKS/ARGUMENTS

In the Office Action mailed September 17, 2008, claims 1-35 were rejected. In response, Applicant hereby requests reconsideration of the application in view of the proposed amendments and the below-provided remarks. Applicant submits that the proposed amendments place the present application in condition for allowance or in better condition for appeal.

For reference, claims 1, 8, 12, 19, 22, 26, and 32 include proposed amendments reciting a FIFO comprising a bit dedicated to a flag that indicates an alignment status for data stored in the FIFO. The amendments are supported, for example, by the original specification at page 8, lines 15-32.

Objections to the Specification

The Office Action also suggests that section headings be added to the specification according to the guidelines set forth in the MPEP. As stated in the previous response, Applicant notes that the suggested section headings are not required. The current Office Action maintains the objection “because 37 CFR 1.77(c) states that [the] ‘application should include’ the section headers set forth above.” Office Action, page 11, lines 19-20, emphasis added. Applicant points out that the word “should” is a permissive qualifier. A permissive qualifier allows an applicant to use discretion in application of the rule. If the rules intended that section headings be mandatory, this requirement would be indicated by the use of a restrictive qualifier, such as “must” or “shall.” Since the word “should” was used in relation to section headers, an applicant has the option to decline to include the headers while complying with the rule.

In this case, Applicant elects to use the discretion allowed by 37 CFR 1.77(c) to decline to include section headings. Hence, Applicant respectfully declines to amend the specification to include the indicated section headings. Since the section headings are not required, Applicant requests that the objection to the specification be withdrawn.

Claim Rejections under 35 U.S.C. 102 and 103

Claims 1-4, 22-25, 16, 27, 29, and 30 were rejected under 35 U.S.C. 102(b) as being anticipated by Gregg et al. (U.S. Pat. No. 5,598,442, hereinafter Gregg). Additionally, claims 5-11, 28, and 31-35 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gregg in view of Imanishi (U.S. Pat. No. 5,974,055, hereinafter Imanishi). Additionally, claims 12-21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gregg in view of Wakeman et al. (U.S. Pat. NO. 5,790,786, hereinafter Wakeman). However, Applicant respectfully submits that these claims are patentable over Gregg, Imanishi, and Wakeman for the reasons provided below.

Independent Claim 1

Claim 1 recites a plurality of FIFOs “wherein each FIFO comprises a bit dedicated to a flag indicating an alignment status for the data collected in the FIFO, the flag set in response to the detected frequency compensation code” (emphasis added).

In contrast, Gregg does not disclose a FIFO including a bit dedicated to a flag indicating an alignment status for the data collected in the FIFO, the flag set in response to the detected frequency compensation code. Gregg merely discloses “examin[ing] the characters to determine if all of the conductors have achieved character synchronism.” Gregg, column 4, lines 16-17. Gregg further describes “tak[ing] the link out of the sync acquired state” (column 4, lines 23-24) in response to detecting an “error” (column 4, lines 21-22) and discarding bits from the bit streams (column 4, lines 30-32) until determining if a “sync acquired” state is entered (column 4, lines 32-41). In other words, Gregg discloses detecting and discarding out of sync data, not a FIFO including a bit dedicated to a flag indicating an alignment status, as recited in claim 1.

For the reasons presented above, Gregg does not disclose all of the limitations of the claim because Gregg does not disclose a FIFO including a bit dedicated to a flag indicating an alignment status for the data collected in the FIFO, the flag set in response to the detected frequency compensation code, as recited in the claim. Accordingly, Applicant respectfully asserts claim 1 is patentable over Gregg because Gregg does not disclose all of the limitations of the claim.

Independent Claim 22

Applicant respectfully asserts independent claim 22 is patentable over Gregg at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 22 recites “a first in first out buffer (FIFO) adapted to receive the serial data, each FIFO comprising a bit dedicated to a flag indicating an alignment status for data collected in the FIFO, the flag set in response to detection of the frequency compensation code” (emphasis added).

Here, although the language of claim 22 differs from the language of claim 1 and the scope of claim 22 should be interpreted independently of claim 1, Applicant respectfully asserts that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 22. Accordingly, Applicant respectfully asserts claim 22 is patentable over Gregg because Gregg does not disclose a FIFO having a bit dedicated to a flag indicating an alignment status for data collected in the FIFO.

Independent Claim 26

Applicant respectfully asserts independent claim 26 is patentable over Gregg at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 26 recites “each FIFO coupled to a data line and comprising a bit dedicated to a flag indicating an alignment status for data collected in the FIFO, the flag set in response to detection of the frequency compensation code” (emphasis added).

Here, although the language of claim 26 differs from the language of claim 1 and the scope of claim 26 should be interpreted independently of claim 1, Applicant respectfully asserts that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 26. Accordingly, Applicant respectfully asserts claim 26 is patentable over Gregg because Gregg does not disclose a FIFO having a bit dedicated to a flag indicating an alignment status.

Independent Claim 8

Claim 8 recites “first in first out buffer (FIFO) comprising a bit dedicated to a flag indicating an alignment status for data collected in the FIFO, the flag set in response to detection of the frequency compensation code” (emphasis added).

In contrast, neither Gregg nor Imanishi teaches a FIFO having a bit dedicated to a flag indicating an alignment status for data collected in the FIFO. Accordingly, Applicant respectfully asserts claim 8 is patentable over the combination of Gregg and Imanishi because neither Gregg nor Imanishi teaches a limitation of the claim.

Independent Claim 32

Claim 32 recites “each FIFO receiving a serial bit-stream and comprising a bit dedicated to a flag indicating an alignment status for data collected in the FIFO, the flag set in response to detection of the frequency compensation code” (emphasis added).

Here, although the language of claim 32 differs from the language of claim 8 and the scope of claim 32 should be interpreted independently of claim 8, Applicant respectfully asserts that the remarks provided above in regard to the rejection of claim 8 also apply to the rejection of claim 32. Accordingly, Applicant respectfully asserts claim 32 is patentable over Gregg and Imanishi because neither Gregg nor Imanishi teaches a FIFO including a bit dedicated to a flag indicating an alignment status for data collected in the FIFO.

Independent Claim 12

Claim 12 recites “a first in first out buffer (FIFO) comprising a bit dedicated to a flag indicating an alignment status for data collected in the FIFO, the flag set in response to detection of the frequency compensation code” (emphasis added).

In contrast, neither Gregg nor Wakeman teaches a FIFO having a bit dedicated to a flag indicating an alignment status for data collected in the FIFO. Accordingly, Applicant respectfully asserts claim 12 is patentable over the combination of Gregg and Wakeman because neither Gregg nor Wakeman teaches a limitation of the claim.

Independent Claim 19

Applicant respectfully asserts independent claim 19 is patentable over Gregg and Wakeman at least for similar reasons to those stated above in regard to the rejection of independent claim 12. In particular, claim 19 recites “a first in first out buffer (FIFO) adapted to receive the serial data, each FIFO comprising a bit dedicated to a flag

indicating an alignment status for data collected in the FIFO, the flag set in response to detection of the frequency compensation code” (emphasis added).

Here, although the language of claim 19 differs from the language of claim 12 and the scope of claim 19 should be interpreted independently of claim 12, Applicant respectfully asserts that the remarks provided above in regard to the rejection of claim 12 also apply to the rejection of claim 19. Accordingly, Applicant respectfully asserts claim 19 is patentable over Gregg and Wakeman because neither Gregg nor Wakeman teaches a FIFO including a bit dedicated to a flag indicating an alignment status for data collected in the FIFO.

Dependent Claims

Claims 2-7, 9-11, 13-18, 20, 21, 23-25, 27-31, and 33-35 depend from and incorporate all of the limitations of the corresponding independent claims 1, 8, 12, 19, 22, 26, and 32. Applicant respectfully asserts claims 2-7, 9-11, 13-18, 20, 21, 23-25, 27-31, and 33-35 are allowable based on allowable base claims. Additionally, each of claims 2-7, 9-11, 13-18, 20, 21, 23-25, 27-31, and 33-35 may be allowable for further reasons.

CONCLUSION

Applicant respectfully requests reconsideration of the claims in view of the proposed amendments and remarks made herein. A notice of allowance is earnestly solicited.

Respectfully submitted,
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